Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-44 (cancelled)

- 45. (New) A method for treatment of radiomucositis comprising the administration to a mucous membrane of an effective amount of a compound chosen from flavonoids and isoflavonoids in the form of a mixture with a vehicle which is liquid at room temperature and which gels at the temperature of the mucous membrane and which is capable of adhering to the mucous membrane because of its gelled state.
- 46. (New) The method of claim 45 wherein administration to the mucous membrane occurs prior to radiotherapy or combined radiochemotherapy.
- 47. (New) A method for protecting a mucous membrane during radiotherapy or combined radiochemotherapy comprising applying to the mucous membrane, prior to the radiotherapy or combined radiochemotherapy, an effective amount of a compound chosen from flavonoids and isoflavonoids in the form of a mixture with a vehicle which is liquid at room temperature and which gels at the temperature of the mucous membrane and which is capable of adhering to the mucous membrane because of its gelled state.

2

- 48. (New) A pharmaceutical composition for the treatment of radiomucositis comprising an effective quantity of a compound chosen from flavonoids and isoflavonoids in the form of a mixture with a vehicle which is liquid at room temperature and which gels at the temperature of the mucous membrane and which is capable of adhering to the mucous membrane because of its gelled state.
- 49. (New) The composition according to claim 48, whose vehicle is an aqueous vehicle and comprises a mixture of 0.05 to 5% by weight of an agent conferring viscosity and of 1 to 20% by weight of an agent modifying the viscosity according to the temperature.
- 50. (New) The composition according to claim 49, in which the agent modifying the viscosity according to the temperature is chosen from poloxamers, poloxamines, and divinylbenzenesorbitol compounds.
- (New) The composition according to claim 48, whose vehicle is an aqueous vehicle and comprises a mixture of 0.1 to 3% by weight of an agent conferring viscosity and of 5 to 20% by weight of an agent modifying the viscosity according to the temperature.
- 52. (New) The composition according to claim 51, in which the agent modifying the viscosity according to the temperature is chosen from poloxamers, poloxamines, and divinylbenzenesorbitol compounds.

Attorney Docket No. P66226US0 Application No. 09/764,990

- 53. (New) The composition according to claim 48, in which the flavonoid is chosen from a rutoside, diosmin, quercitin, tangeretin, and hesperidin.
- 54. (New) The composition according to claim 48, in which the isoflavonoid is genistein, daidzin, or glycitin.
- 55. (New) The composition according to claim 53, in which the rutoside is rutin.
- 56. (New) The composition according to claim 48, wherein the vehicle is water.
- 57. (New) The composition according to claim 48 having a viscosity less than 200 x 10⁻³ Pa.s at 35-37° C.
- New) A pharmaceutical composition for the treatment of radiomucositis comprising from 0.5 to 10% of a rutoside in the form of mixture with a vehicle which is liquid at room temperature and which gels at the temperature of the mucous membrane and which is capable of adhering to the mucous membrane because of its gelled state.
- 59. (New) The composition according to claim 58 containing from 2 to 10% of the rutoside.
- 60. (New) The composition according to claim 58 containing from 1 to 5% of the rutoside.

- 61. (New) The composition according to claim 58 whose vehicle is an aqueous vehicle and comprises a mixture of 0.05% to 5% by weight of an agent conferring viscosity and of 1 to 20% by weight of an agent modifying the viscosity according to the temperature.
- 62. (New) The composition according to claim 61 in which the agent modifying the viscosity according to the temperature is chosen from poloxamers, poloxamines, and divinylbenzenesorbitol compounds.
- 63. (New) The composition according to claim 58 whose vehicle is an aqueous vehicle and comprises a mixture of 0.1 to 3% by weight of an agent conferring viscosity and of 5 to 20% by weight of an agent modifying the viscosity according to the temperature.
- 64. (New) The composition according to claim 63 in which the agent modifying the viscosity according to the temperature is chosen from poloxamers, poloxamines, and divinylbenzenesorbitol compounds.
- 65. (New) The composition according to claim 58 in which the flavanoid is chosen from a rutoside, diosmin, quercitin, tangeretin, and hesperidin.
- 66. (New) The composition according to claim 58, in which the isoflavonoid is genistein, daidzin, or glycitin.

- 67. (New) The composition according to claim 58 in which the rutoside is rutin.
- 68. (New) The composition according to claim 58 wherein the vehicle is water.
- 69. (New) The composition according to claim 58 having a viscosity less than 22 x 10⁻³ Pa.s at 35-37 °C.
- 70. (New) A method for treatment of chemomucositis comprising the administration to a mucous membrane of an effective amount of a compound chosen from flavonoids and isoflavonoids in the form of a mixture with a vehicle which is a liquid at room temperature and which gels at the temperature of the mucous membrane and which is capable of adhering to the mucous membrane because of its gelled state.
- 71. (New) The method according to claim 70 wherein said chemomucositis is a chemomucositis induced by radiotherapy.
- 72. (New) A pharmaceutical composition for the treatment of radiomucositis or of chemomucositis, consisting of an effective quantity of (a) one compound chosen from flavonoids and isoflavonoids in the form of a mixture with (b) a vehicle which is liquid at room temperature and which gels at the temperature of the mucous membrane and which is capable of adhering to the mucous membrane because of its gelled state.

- 73. (New) The composition according to claim 72 in which the flavonoid is chosen from a rutoside, diosmin, quercitin, tangeretin, and herperidin.
- 74. (New) The composition according to claim 72 in which the isoflavonoid is geistein, daidzin, or glycitin.
- 75. (New) The composition according to claim 73 in which the rutoside is rutin.
- 76. (New) The composition according to claim 72 whose vehicle is an aqueous vehicle and comprises a mixture of 0.05 to 5% by weight of an agent conferring viscosity and of 1 to 20% by weight of an agent modifying the viscosity according to the temperature.
- 77. (New) The composition according to claim 72 whose vehicle is an aqueous vehicle and comprises a mixture of 0.1 to 3% by weight of an agent conferring viscosity and of 5 to 20% by weight of an agent modifying the viscosity according to the temperature.
- 78. (New) The composition according to claim 76 in which the agent modifying the viscosity according to the temperature is chosen from poloxamers, poloxamines, and divinybenzenesorbitol compounds.

Attorney Docket No. P66226US0 Application No. 09/764,990

79. (New) The composition according to claim 77 in which the agent modifying the viscosity according to the temperature is chosen from poloxamers, poloxamines, and divinybenzenesorbitol compounds.